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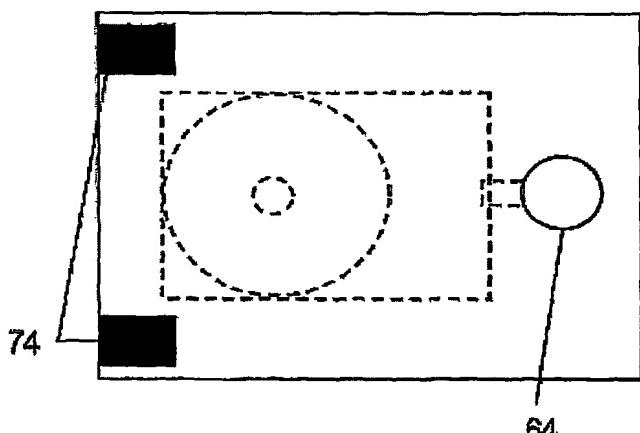
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(54) Title: PIEZOELECTRIC INK JET PRINTER HEAD AND ITS MANUFACTURING PROCESS



(57) Abstract: Disclosed is a piezoelectric ink jet printer head in which a chamber and an ink storage are integrally formed. A process for manufacturing the ink jet printer head is also disclosed. The ink jet printer head formed by laminating a plurality of plates includes: a) an actuator portion being composed of upper and lower electrodes, a piezoelectric plate inserted between the upper and lower electrodes, a protection layer placed on the upper electrode, and a resilient plate disposed beneath the lower electrode; b) an ink passage portion composed of a spacer disposed beneath the resilient plate and forming a side portion of a chamber, a channel plate disposed beneath the spacer, the channel plate forming an ink passage in one side of the chamber and simultaneously expanding the chamber, and a nozzle plate disposed beneath the channel plate, the nozzle plate forming the lower side of the chamber and having a nozzle communicating with the chamber; and c) an ink-supplying portion formed by a through-hole reaching the ink passage of the channel plate through the actuator portion and the spacer.

WO 2004/110768 A1

communicating with the chamber; and c) an ink-supplying portion formed by a through-hole reaching the ink passage of the channel plate through the actuator portion and the spacer.